What is claimed is:

1. A process for modifying a polymeric substrate surface comprising:

a) providing a polymeric substrate having first and second major surfaces;

b) contacting a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor with the first major surface to form an interface, wherein the second major surface remains substantially uncoated by the photoreactive solution; and

c) exposing the interface to actinic radiation;

wherein the inorganic photochemical electron donor comprises a soluble non-volatile salt.

2. The process of claim 1, wherein the inorganic photochemical electron donor comprises at least one atom selected from the group consisting of sulfur, nitrogen, and phosphorus.

3. The process of claim 1, wherein the soluble non-volatile salt is an alkali metal salt or a guanidinium salt.

4. The process of claim 3, wherein the alkali metal salt is selected from the group consisting of alkali metal thiocyanates, alkali metal sulfides, alkali metal hydrosulfides, alkali metal disulfides, alkali metal tetrasulfides, alkali metal thiocarbonates, alkali metal thiooxalates, alkali metal thiophosphates, alkali metal thiosulfates, alkali metal dithionites, alkali metal sulfites; alkali metal selenocyanates, alkali metal selenides, alkali metal azides, alkali metal iodides, and alkali metal triiodides.

5. The process of claim 1, wherein the polymeric substrate is thermoplastic.

6. The process of claim 1, wherein the polymeric substrate comprises polyester.

7. The process of claim 1, wherein the polymeric substrate comprises polyimide.

8. The process of claim 1, wherein the polymeric substrate comprises fluoropolymer.

9. The process of claim 1, wherein the actinic radiation has a wavelength within the range of from about 240 nanometers to about 300 nanometers.

10. The process of claim 9, wherein the actinic radiation has a wavelength within the range of from about 250 nanometers to about 260 nanometers.

11. The process of claim 9, further comprising the step of bonding the exposed interface to a second substrate.

12. The process of claim 1, wherein the interface is exposed to actinic radiation through the polymeric substrate.

13. The process of claim 1, wherein the interface is exposed to actinic radiation in an image-wise manner.

14. The process of claim 1, wherein the solvent is water.

15. The process of claim 1, wherein the solvent comprises water and at least one organic solvent.

16. The process of claim 1, wherein the photoreactive solution comprises at least one sensitizer.

17. The process of claim 1, further comprising the step of bonding the exposed interface to a second substrate.

18. The process of claim 17, wherein the second substrate is in film form, and wherein the film comprises a polymer selected from the group consisting of a polyamide, a polyolefin, a polyurethane, a polyester, a polyimide, polystyrene, a polycarbonate, a polyketone, a polyurea, an acrylic, and mixtures thereof.

19. The process of claim 1, further comprising the step of bonding the exposed interface to glass.

20. The process of claim 1, wherein the photoreactive solution further comprises a nucleophile.

21. A polymeric substrate having a modified surface prepared according to a process comprising:

a) providing a polymeric substrate having first and second major surfaces;

b) contacting a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor with the first major surface to form an interface, wherein the second major surface remains substantially uncoated by the photoreactive solution; and

c) exposing the interface to actinic radiation;

wherein the inorganic photochemical electron donor comprises a soluble non-volatile salt.

22. The polymeric substrate of claim 21, wherein the inorganic photochemical electron donor comprises at least one atom selected from the group consisting of sulfur, nitrogen, and phosphorus.

23. The polymeric substrate of claim 21, wherein the soluble non-volatile salt is an alkali metal salt or a guanidinium salt.

24. The polymeric substrate of claim 23, wherein the alkali metal salt is selected from the group consisting of alkali metal thiocyanates, alkali metal sulfides, alkali metal hydrosulfides, alkali metal disulfides, alkali metal tetrasulfides, alkali metal thiocarbonates, alkali metal thiooxalates, alkali metal thiophosphates, alkali metal thiosulfates, alkali metal dithionites, alkali metal sulfites; alkali metal selenocyanates, alkali metal selenides, alkali metal azides, alkali metal iodides, and alkali metal triiodides.

25. The polymeric substrate of claim 21, wherein the polymeric substrate is thermoplastic.

26. The polymeric substrate of claim 21, wherein the polymeric substrate comprises polyester.

27. The polymeric substrate of claim 21, wherein the polymeric substrate comprises polyimide.

28. The polymeric substrate of claim 21, wherein the polymeric substrate comprises fluoropolymer.

29. The polymeric substrate of claim 21, wherein the actinic radiation has a wavelength within the range of from about 240 nanometers to about 300 nanometers.

30. The polymeric substrate of claim 29, wherein the actinic radiation has a wavelength within the range of from about 250 nanometers to about 260 nanometers.

31. The polymeric substrate of claim 21, wherein the interface is exposed to actinic radiation in an image-wise manner.

32. The polymeric substrate of claim 21, wherein the solvent is water.

33. The polymeric substrate of claim 21, wherein the solvent comprises water and at least one organic solvent.

34. The polymeric substrate of claim 21, wherein the photoreactive solution comprises a sensitizer.

35. The polymeric substrate of claim 21, wherein the polymeric substrate is bonded to a polymer film.

36. The polymeric substrate of claim 33, wherein the polymer film and the polymeric substrate are bonded at the exposed interface.

37. A process for preparing a composite article comprising:

a) providing a polymeric substrate having a surface;

b) providing a second substrate having a surface;

c) coating a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor as a thin film onto the surface of the polymeric substrate to form a first interface;

d) contacting the surface of the second substrate with the coated photoreactive solution to form a second interface; and

e) simultaneously exposing the first and second interfaces to actinic radiation sufficient to form a composite article.

38. The process of claim 37, wherein the inorganic photochemical electron donor comprises at least one atom selected from the group consisting of sulfur, nitrogen, and phosphorus.

39. The process of claim 37, wherein the inorganic photochemical electron donor is selected from the group consisting of thiocyanate salts, sulfide salts, hydrosulfide salts, disulfide salts, tetrasulfide salts, thiocarbonate salts, thiooxalate salts, thiophosphate salts, thiosulfate salts, dithionite salts, selenocyanate salts, selenide salts, azide salts, iodide salts, and triiodide salts.

40. The process of claim 37, wherein the polymeric substrate is thermoplastic.

41. The process of claim 37, wherein the polymeric substrate comprises fluoropolymer.

42. The process of claim 37, wherein the actinic radiation has a wavelength within the range of from about 240 nanometers to about 300 nanometers.

43. The process of claim 37, wherein the solvent is water.

44. The process of claim 37, wherein the solvent is aqueous organic.

45. The process of claim 37, wherein the photoreactive solution comprises a sensitizer.

46. The process of claim 37, wherein the second substrate is in film form, and wherein the film comprises a polymer selected from the group consisting of a polyamide, a polyolefin, a polyurethane, a polyester, a polyimide, polystyrene, a polycarbonate, a polyketone, a polyurea, an acrylic, and mixtures thereof.

47. The process of claim 37, further comprising heating the composite article while under pressure.

48. The process of claim 37, wherein the photoreactive solution further comprises a nucleophile.

49. A composite article prepared by a process comprising:

a) providing a polymeric substrate having a surface;

b) providing a second substrate having a surface;

c) coating a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor as a thin film onto the surface of the polymeric substrate to form a first interface;

d) contacting the surface of the polymer film with the coated photoreactive solution to form a second interface; and

e) simultaneously exposing the first and second interfaces to actinic radiation sufficient to form a composite article.

50. The composite article of claim 49, wherein the process further comprises heating the exposed interfaces.

51. A polymeric substrate having a modified surface preparable according to a process comprising:

a) providing a polymeric substrate having a surface;

b) contacting a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor with the polymeric substrate surface to form an interface; and

c) exposing the interface to actinic radiation;

wherein the inorganic photochemical electron donor comprises a soluble non-volatile salt.

52. A composite article preparable by a process comprising:

a) providing a polymeric substrate having a surface;

b) providing a second substrate having a surface;

c) coating a photoreactive solution comprising at least one solvent and at least one inorganic photochemical electron donor as a thin film onto the surface of the polymeric substrate to form a first interface;

d) contacting the surface of the second substrate with the coated photoreactive solution to form a second interface; and

e) simultaneously exposing the first and second interfaces to actinic radiation sufficient to form a composite article;

wherein the inorganic photochemical electron donor comprises a soluble non-volatile salt.